

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

### Pipeline and Hazardous Materials Safety Administration

DOT-SP 14296 (SIXTH REVISION)

EXPIRATION DATE: 2020-01-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: GasCon a Division of Southey Holdings (Pty) Ltd.
Cape Town, South Africa
(U.S. Agent: Tank Service, Inc., Houston, TX)

# 2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, marking, sale and use of certain UN Portable Tanks manufactured in accordance with Section VIII, Division 2 of the ASME Code, instead of Division 1. The portable tanks, mounted in ISO frames, are authorized for the transportation in commerce of Division 2.1 and 2.2 materials. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 178.274(b)(1) and 178.276(b)(1) in that UN portable tanks designed, constructed, certified and stamped in accordance with Section VIII, Division 2 of the ASME Code are not authorized except as specified herein.
- 5. <u>BASIS</u>: This special permit is based on the application of GasCon a Division of Southey Holdings (Pty) Ltd. dated November 13 2015, submitted in accordance with § 107.109 and additional information dated May 18, 2016.

# 6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material Description				
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group	
Division 2.1 and 2.2 materials authorized in UN portable tanks.	2.1 or 2.2	As Appropriate	N/A	

### 7. SAFETY CONTROL MEASURES:

- a. PACKAGING Packagings authorized are UN portable tanks that are designed, constructed, certified and stamped in accordance with Section VIII, Division 2 of the ASME Code, including the ASME Code "U2" stamp. Each portable tank must be constructed in accordance with Triple S Gas Tanks (Pty) Ltd t/a GasCon Drawing numbers EDM-02/247/1/1 dated December 20, 2005 and EDM-02/247/2/1 dated December 20, 2005 and with other drawings, specifications and calculations on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD) and in compliance with the following provisions:
  - (1) **Code:** Tanks must conform to requirements for UN portable tanks in 49 CFR 178.274 in all respects except the design code. This special permit authorizes the use of Section VIII, Division 2, of the ASME Code and ASME Code Case 2624 as the design code.
  - (2) Shell and Head Material: SA612 carbon steel
  - (3) **Tank Capacity and Pressure:** The following range of tank designs is authorized:

Design pressure (See Note 1)	100 psig min.; 500 psig max.
Water capacity	4500 USWG min.; 6550 USWG max.

Note 1: Design pressure means "Maximum Allowable Working Pressure" as used in the ASME Code.

# June 03, 2016

- (4) **Pressure Relief System:** For each tank design, a spring-loaded pressure relief valve (minimum of 3-inch diameter) set at 110% of the design pressure must be provided. A rupture disc in series with the relief valve is optional. The venting capacity requirement for each material must be determined by the flow formulas contained in the Compressed Gas Association (CGA) Pamphlet S-1.2 (1980 edition).
- (5) Maximum Gross Weight 36,000 Kg (79.366 lbs.)
- (6) **Design Temperature Range** -40/55°C (-40/131°F)
- (7) **Welded Joints** Welded joints must be 100% tested by a non-destructive testing method authorized by ASME Code.
- (8) Corrosion Allowance 0.0
- (9) **G-Loadings:** Vertical down 2; Vertical up 2; Longitudinal 2; Transverse 2
- (10) **Openings** Only the following openings (in any combination) are authorized on each tank:

Number	Size (Diameter)	Description of Opening
One (1)	500 mm (19.6 in)	Manway opening on the end
One (1)	65/80 mm (2.5/3.0 in)	Liquid line opening on the bottom
One (1)	65 mm (2.5 in)	Vapor line opening on the bottom
One (1)	162 mm (6.4 in)	Pressure relief valve opening near the top center
One (1)	6.5 mm (0.25 in)	Pressure gauge opening on the end
One (1)	12.5 mm (0.5 in)	Temperature gauge opening on the end
One (1)	57 mm (2.25 in)	Rotary gauge opening on the end

- **Note 1:** Except for the opening for the pressure relief device, all openings must be grouped as described in § 178.245-1(d).
- **Note 2:** Each bottom outlet valve must be provided with a shear section that meets the requirements of § 178.337-12.
  - (11) **Insulation** Tanks may be provided with a sunshield (optional).
  - (12) **Baffles** 2 or 3

# b. TESTING -

- (1) Hydrostatic test certificates for each tank must be maintained by the owner and made available to a DOT representative upon request.
- (2) Each tank must be inspected and retested once every five years as specified for UN portable tanks in accordance with \$ 180.605(c).

### c. OPERATIONAL CONTROLS -

- (1) The pressure produced by the lading and any gas padding at  $50^{\circ}\text{C}$  may not exceed the design pressure of the portable tank.
- (2) The tank must be filled by weight in accordance with  $\S$  173.315.
- (3) Each tank must be visually inspected prior to each shipment to ensure that it has not been damaged during loading.

# 8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the <u>name of the manufacturer and location (city and state) of the facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by the OHMSAPD <u>for a specific manufacturing facility</u>.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. UN portable tanks manufactured under this special permit must be in conformance with Triple S Gas Tanks (Pty) Ltd t/a GasCon Drawing numbers EDM-02/247/1/1 dated December 20, 2005 and EDM-02/247/2/1 dated December 20, 2005 and other drawings on file with OHMSAPD, except that whenever a provision of this special permit is in conflict with the drawings, Triple S Gas Tanks (Pty) Ltd must comply with the conditions of this special permit and make appropriate revisions to the drawing(s). Revisions to drawings must be prepared by the manufacturer and be submitted to OHMSAPD. Later drawings and revisions are considered a part of this special permit when acknowledged in writing by OHMSAPD.

### g. MARKING -

(1) Each portable tank must be plainly marked on both sides near the middle, in letters and numerals at least two inches high on a contrasting background, "DOT-SP 14296." Additionally, where applicable, each tank must be marked "Case 2624" on the name plate and on the Manufacturer's Data Report.

- (2) Each pressure relief valve must be marked with its set pressure and flow rate in SCFH.
- h. A test report documenting a satisfactory ISO prototype test for each tank design must be on file with OHMSAPD prior to the first shipment.
- i. Transportation of Division 2.1 material (flammable gases) is not authorized aboard cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.101).
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq</u>:
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by  $$107.601 \text{ } \underline{\text{et seq.}}, \text{ when applicable.}$

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption' to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for Dr. Magdy El-Sibaie

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <a href="http://hazmat.dot.gov/sp app/special permits/spec perm index.htm">http://hazmat.dot.gov/sp app/special permits/spec perm index.htm</a>
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PO: Andrew Eckenrode